

Serial No. 10/522,973
Art Unit 2114

PU020362
Customer No. 24498

Listing and Amendments to the Claims

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1. (Currently Amended) A media area network comprising:
a storage system including at least one storage device for storing digitized information;
a host system for providing overall control of the media area network; and
a host bus adapter for providing a link between the host system and the storage system, the host bus adapter having a lower-level port driver that includes:
means for monitoring communications between the storage system and the host bus adapter through an active port, and
means for switching to an alternative port in real time, thereby achieving fail-over recovery in the event of a communications failure, the switching means including:
means for queuing requests from an original port that failed for retry on the alternative port;
means for canceling all outstanding requests on the original port after said queuing; and
means for issuing commands via the alternative port, including commands associated with the requests previously queued by said queuing means.
2. (original) The media area network according to claim 1 wherein the monitoring means further comprises means for determining whether the storage system successfully completed at least one command.
3. (original) The media area network according to claim 2 wherein the monitoring means further comprises means for determining whether unsuccessful completion of the at least one command can be corrected by fail-over recovery.
4. Cancelled
5. (previously presented) The media area network according to claim 1 wherein the switching means further comprises means for checking whether cancellation of

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the outstanding commands has occurred, and if not then initiating failover recovery of any failed storage system controller.

6. (Currently amended) A method for achieving fail-over recovery in a media area network having a storage system with at least one storage device for storing digitized information, a host system for providing overall control of the media area network; and a host bus adapter for providing a link between the host system and the storage system, the method comprising the steps of

monitoring, at a lower-level port driver in the host bus adapter, communication status between the storage system and the host bus adapter, and in the event of a failure;

initiating switching at the lower-level port driver to activate an alternative port, thereby achieving fail-over recovery, including the steps of:

queuing requests from an original port that failed for retry on the alternative port;

canceling all outstanding requests on the original port after said step of queuing; and

issuing commands via the alternative port, including commands associated with the requests previously queued for retry.

7. (original) The method according to claim 6 wherein the step of monitoring the communication status between the storage system and the host bus adapter further comprises the step of determining whether the storage system successfully completed at least one command.

8. (original) The method according to claim 7 further comprising the step of determining whether unsuccessful completion of the at least one command can be corrected by fail-over recovery.

9. Cancelled

10. Cancelled

11. (Currently amended) ~~The method according to claim 6 further comprising the step of~~ A method for achieving fail-over recovery in a media area network having a

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storage system with at least one storage device for storing digitized information, a host system for providing overall control of the media area network; and a host bus adapter for providing a link between the host system and the storage system, the method comprising the steps of

monitoring, at a lower-level port driver in the host bus adapter, communication status between the storage system and the host bus adapter, and in the event of a failure;

checking whether cancellation of the outstanding commands occurred, and if not then initiating fail-over recovery of any failed storage system controller;

initiating switching at the lower-level port driver to activate an alternative port, thereby achieving fail-over recovery, including the steps of:

queuing requests from an original port that failed for retry on the alternative port;

canceling all outstanding requests on the original port; and

issuing commands via the alternative port, including commands associated with the requests previously queued for retry.